#### **NCKLS Makerboxes Brainstorm Ideas**

#### **Builder Makerbox:**

- Build gem/crystal structures—Partner with Engineer
- Build a stricter to survive a dinosaur/Godzilla attack
- Architectural Emulation
- Give everyone the same materials and say everyone build a
- Divide group in two and give them identical materials. Have one group build something that the other group can't see. Then have them give directions to the other group to build an identical item step by step (talk each other through the building process).
- Minute to Win It building program
- Building Telephone: one person gives instructions that are passed down the line until the last person tries to build the item
- Building Natural Structures—Partner with engineer or contractor
- DiVinci 3D printer—Partner with a robotics/engineering club
- Iron LEGO Challenge program

#### Photo Booth Makerbox:

- School Picture Retake—Partner with school
- Awkward Photo Shoots—Partner with Office Depot, Best Buy for photo paper
- Fashion Show with Red Carpet—Partner with photography stores
- Travel at the Library using a green screen to impose photo background for new pictures
- Photo Booth Themed Book Club—Partner with High School/Middle Schools
- Photography Workshop—Partner with local photographer
- DIY Prop Program—Partner with art gallery to display photos
- Teach teens to use a real camera & techniques to mimic Instagram filters
- Dance/Social event—Partner with schools
- Mini Comic Con—Partner with comic book store
- Library Card Signup Day—Partner with Friends of the Library
- Awkward Family Photos—Partner with Walmart
- Recreations—Partner with Radio Shack
- Bring booth to different clubs around town—Local schools
- Red Carpet Movie Night—Partner with movie theater

# Solar Makerbox:

- Solar ovens out of pizza boxes—Partner with YMCA or Boy Scouts
- How much physical energy to power a xBox or TV with one of those bikes that lets you
  produce electricity
- Better for the environment—Solar panel project for SR
- Solar Panel Garden
- Part of a building project for a "tiny house"
- Solar Snap Circuits passive program for all ages

- Partner with an energy company
- Future Careers program—Partner with local colleges
- Solar Panels program—Partner with company supplying solar resources
- Solar Printing program
- Sustainability program

## Break It reMake It Makerbox:

- Repurpose to make jewelry—Partner with a local artist
- Laptop rebuild—Partner with local computer store
- Hacker event—Partner with computer programmers
- Wire Sculptures/Crafts
- Make earrings—Partner with local artist
- Cyborg Barbies/Robot Barbies
- Rube Goldberg Machine—Partner with an engineer
- DVD Mosaic passive program—Partner with local office supply or computer repair store
- Make computer robots—Partner with a thrift store or computer club
- Robot making competition using computer parts—Partner with electronic recycler
- Your vision of the future in robotics—Partner with state legislators and senators
- Gift Hack Jewelry—Partner with homeschool groups
- Mini Defcon

### Circuits Makerbox:

- Lighted wearable t-shirts program
- Build controllers for IGD trivia games
- Passive LED quilt pieces to display for/with local businesses
- Program with a local electrician
- Electronic Quilt: provide how-to document; give out squares of the same size; let teens work on square circuits at their own pace; connect the squares into an electronic quilt to display at branches.

### LEGO Makerboxes:

- Architectural Careers program—Partner with local architect
- Food donation program: add a new LEGO brick for each donated item—Partner with local food shelf/social service agency
- Recreate a Caldecott image with LEGOs
- Tie in with library building or renovation project—Partner with engineer/architect
- Invite college students to come build with younger children—Partner with local college or art museum
- Buddy LEGO program: pair teens and children to build—Partner with teen volunteers and NHS
- 90 Second Newbery Stop Motion Animation program

- Math Programs: using LEGO projects to demonstrate different geometry and algebra theories such as using a shadow to find an object's height—Partner with local high school
- Bridge Challenge passive program: build a bridge between 2 tables and see if it is structurally sound
- Follow/Finish a pattern passive program
- Building Challenges with limited numbers of bricks passive program

# Mini Weapons of Mass Destruction Makerbox:

- Careers program (such as welding)—Partner with community tech school
- Career programs—Partner with Military recruiters
- History of War program—Partner with local veterans
- Distance and Velocity program—Partner with local math and science teachers